CellPipe® 55 Series

This router/ VPN gateway solution helps you meet the needs of residential and SOHO customers who want greater protection for their data. With the CellPipe® 55 on their premises, you can provide sophisticated security features, along with cost-effective ADSL transport delivering speeds up to 8 Mbps. Value-added capabilities include an IPSec VPN option to enhance data security during transport and an advanced stateful inspection firewall to protect customer networks. State-of-the-art features for intrusion detection, denial-of-service protection and content filtering are all easy to configure with well-designed set-up wizards.

Applications

- High-performance data and video services, including intranets, extranets, videoconferencing, Web hosting and fast Internet access
- Enhanced security for data during transport and on customer premises
- Small businesses and residences, including SOHOs, Multiple Dwelling Units, Multiple Tenant Units and other in-building installations

Features

- **High-speed data transport**—Enables ADSL connections over a single copper pair with data rates up to 8 Mbps downstream and 800 Kbps upstream
  - CellPipe® 55A-GX supports ADSL over POTS (ADSL Annex A)
  - CellPipe® 55A-BX supports ADSL over ISDN (ADSL Annex B)
- **Advanced stateful inspection firewall**—Provides state of-the-art security features, including denial-of-service protection, intrusion detection, monitoring and content filtering
- **Dynamic VPN option**—Offers the added security of an IPSec-based VPN software upgrade, including VPN connections between dynamic IP addresses
- **Robust LAN connectivity**—Provides four 10/100BaseT LAN interfaces that allow direct connection, along with an onboard Ethernet switch and DMZ option
- **Quality of Service capabilities**—Maintains reliable performance for critical applications, with IP traffic shaping and ATM QoS (UBR, CBR and VBR-nrt)
- **ISDN adapter**—Allows parallel connection to an ISDN network for dial back up, remote management and fax transmissions
- **Set-up wizards**—Makes configuration and start up exceptionally easy
- **Centralized management**—Enables remote installation, easy upgrades and extensive performance monitoring

Benefits

- **Enhanced revenue**—Expand your service offerings and attract new subscribers by offering valuable security features
- **Application flexibility**—Support a full spectrum of carrier-class data and video services for residential and SOHO customers
- **Minimize operating expenses**—Easy configuration and remote management capabilities keep your operating costs down
- **Competitive edge**—Add state-of-the art security features to your service offerings
- **Reliable Performance**—IP and ATM QoS (UBR, CBR and VBR-nrt) capabilities help you maintain the performance levels your subscribers demand
- **Customer retention**—Keep your customers satisfied by providing the value-added services they're looking for, along with cost-effective high-speed transport

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Technical Specifications

1. **Modes**

Multi protocol router
IP , IPX and NetBIOS/IP router, HTTP /HTTPS server (WEBconfig), DNS client, DNS server, DNS relay, DHCP client, DHCP relay and DHCP server incl. autodetection

2. **Ports**

ADSL WAN (RJ-11)
Item no. 60682: Deutsche Telekom U-R2 T-DSL, ADSL over ISDN (ITU G.992.1 Annex B), as well as ADSL over ISDN proprietary (Texas Instruments, ADI, Alcatel), ETSI TS 101 388; Item no. 60681: ADSL over POTS (ITU G.992.1 Annex A, ANSI T1.413, ITU G.992.2 (G.Lite), G.994.1 (G.hs))
Automatic detection of ADSL line codes, ATM parameters and protocols

ISDN WAN (RJ-45)
ISDN SBus, point-to-point and point-to-multipoint configuration, I.430, (autosensing); D channel 1TR6, DSS1 (Euro-ISDN); B channel PPP (asynchronous/synchronous), X.75, HDLC, MLPPP for channel bundling, CAPI 2.0 via LANCAPI, Stac data compression

Ethernet LAN (4 x RJ-45)
4 x Ethernet IEEE 802.3 (switch), 10/100Base-T autosensing, node/hub autodetection, port segmentation configurable, e.g. for DMZ mode or 4 separated local networks

3. **Firewall**

Stateful inspection, IP packet filter with port ranges; masquerading (NAT/PAT) of TCP, UDP, ICMP, FTP, PPTP, H.323, NetMeeting and IPSec; DNS forwarding; inverse masquerading for IP services from the Intranet such as web server; support of 2 local networks; e.g. DMZ with own Internet address range without NAT.

4. **Quality of Service**

IP traffic-shaping/limiting with dynamic, absolute or per connection transfer limits or guaranteed minimum bandwidths, TOS priority queuing.

5. **Security**

Intrusion detection (IP spoofing, login attempt, port scans), denial-of-service protection (fragmentation error, SYN-flooding, automatically closing of ports/connections). DNS hitlist as well as wild card filter (URL blocking). High availability with ISDN dial backup for Internet access or VPN connections. Email alerting, SNMP traps and SYSLOG. PAP, CHAP and MS-CHAP as PPP authentication, password-protected configuration remote access per interface, access control list (IP, MAC and protocol filter) for configuration access and LANCAPI, ISDN remote access list. FirmSafe with two firmware versions for absolute secure software upgrades.

6. **LAN protocols**

IP:
ARP, Proxy ARP, IP, ICMP, UDP, TCP, TFTP, RIP-1, RIP-2, DHCP, DNS, SNMP, HTTP, HTTPS BOOTP, NTP, NetBIOS, LANCAPI

IPX:
IP, SAP, IPX and SPX watchdogs, NetBIOS watchdogs

7. **WAN protocols**

PPPoE, PPPoA, PPTP, IPoA and Plain Ethernet

8. **Transmission rates**

LAN (maximum)
10/100 Mbps, full duplex operation

WAN (maximum)
Downstream 8 Mbps, upstream 800 kbps

9. **Statistics**

Counter
Comprehensive ADSL, ATM, Ethernet, IP and DNS statistics; SYSLOG error counter, connecting and online time as well as transfer quantity per station; accounting information exportable via CELLmonitor and SYSLOG, Firewall event log

10. **Management**

Outband
Command-line interface, serial V.24/V.28 port (8-pol. Mini-DIN)

Inband
CELLconfig incl. setup wizard for Internet access, security, firewall, remote access and LAN-LAN coupling; CELLmonitor status display; remote maintenance via ISDN; Telnet, browser (HTTP/HTTPS) and TFTP configuration as well as firmware upload; SNMP management via SNMP V2, WAN or LAN access separately activated; simultaneous remote configuration and management of several devices with CELLconfig, supervisor alarm via SNMP traps, SYSLOG and eMail

Tools
CELLconfig (Windows configuration program), CELLmonitor (Windows status display), WEBconfig (integrated web server)

11. **Hardware**

Power adapter
12 VA, external power adapter (230 V)

Enviroment
Temperature 5–40 °C; humidity 0–80 %; non-condensing

Housing
210 x 140 x 45 mm (B x H x T), robust plastic case, ports on the back, prepared for wall mounting, Kensington-style lock

Approvals
EU (CE certification: EN 55022, EN 55024, EN 60950)

To learn more about our comprehensive portfolio, please contact your Lucent Technologies Sales Representative or Lucent Business Partner, or visit our web site at www.lucent.com.

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